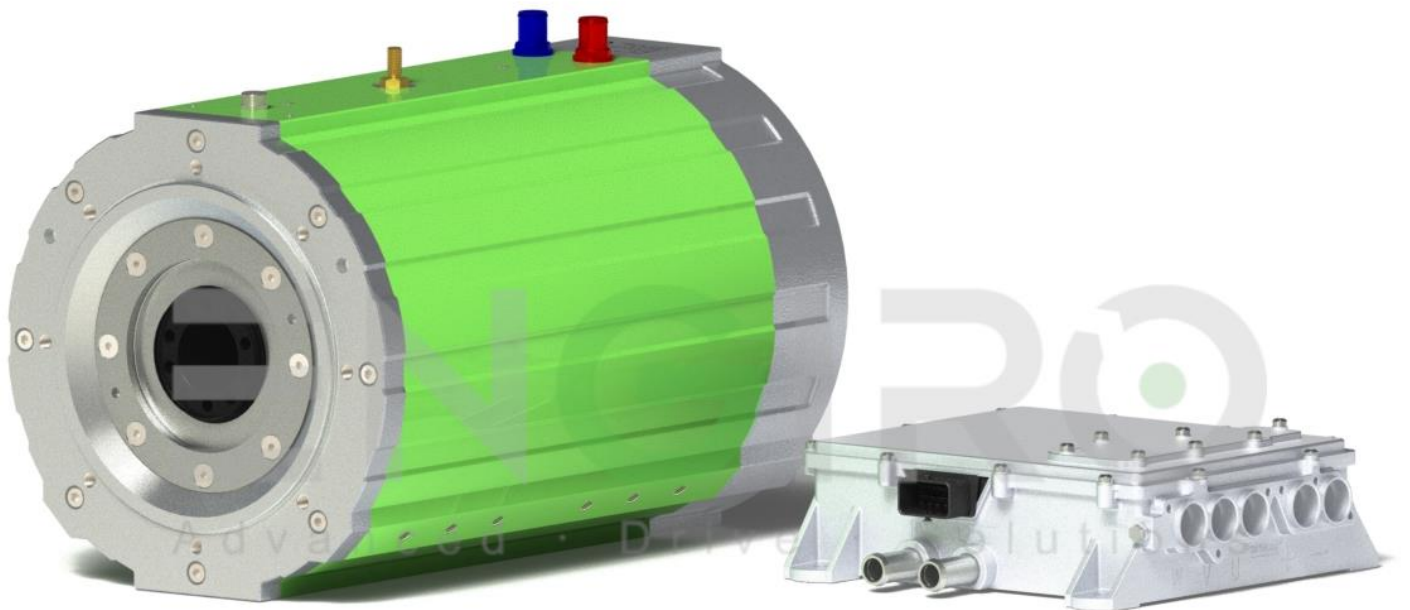


260W-25018-SFR 800V Marine Set

150 kW drive set for marine application

Art.-No.: 1758



KEY FEATURES

- Interior permanent magnet synchronous machine
- 800V 3-phase motor controller
- Water-cooled
- Specially suitable for outboards to replace gasoline engines
- Double shaft end with screw flange possible
- High efficiency over a wide speed range

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To be noted:

The information in this technical data sheet is based on our current knowledge and experience. Due to the wide range of possible influences during application, they do not exempt the processor and user from carrying out their own tests and trials. Although the suitability for a specific application can be estimated from our information, a legally binding assurance is by no means possible. Depending on the individual case, we recommend consultation with us. Any industrial property rights and applicable laws must be observed by the recipient of our products on his own responsibility.

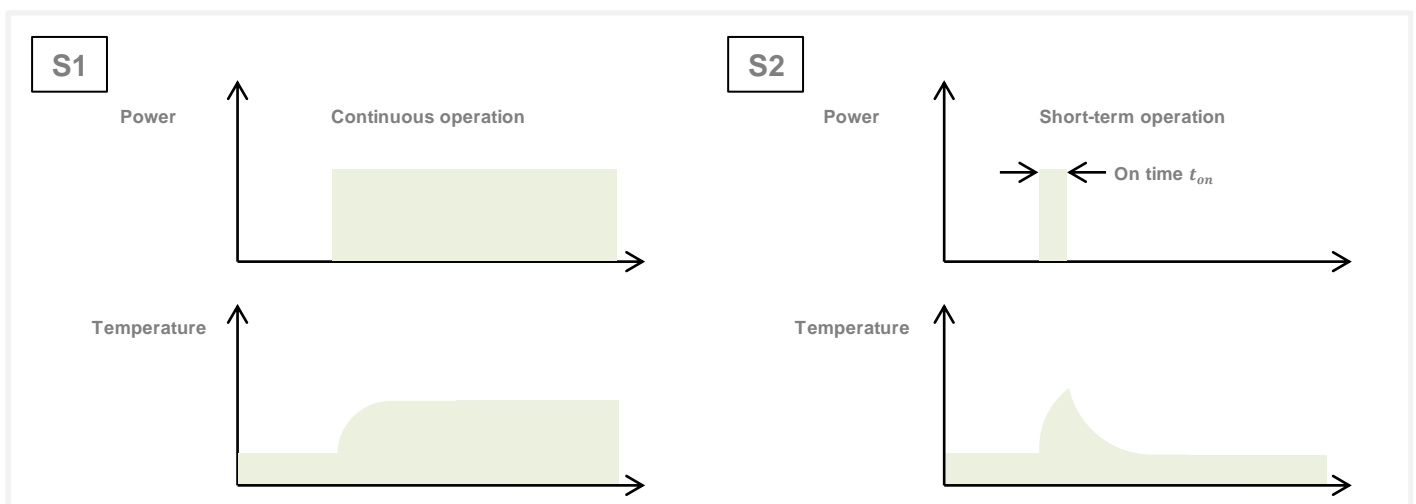
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Characteristic Operation Points¹⁾ (cooling as specified on next page)

		S1	S2	S2	
Feasible operation time	t_{on}	continuous	30 min	60 sec	
Torque	T	633	690	920	Nm
Power	P	150	163	192	kW
Phase rms-current (AC)	I_{rms}	200	215	300	A
Battery current (DC)	I_{DC}	226	249	300	A
Battery voltage (DC)	U_{DC}	700	700	700	V
Speed	n	2260	2260	2000	rpm
Electric frequency	f_{el}	188	188	171	Hz
Set Efficiency	η_{tot}	95	95	92	%

Maximum Operating Range

		Min.	Nom.	Max.	
Torque	T_{max}	-	633	920	Nm
Power	P_{max}	-	150	192	kW
Phase rms-current (AC)	$I_{rms,max}$	-	200	300 ²⁾	A
Battery current (DC)	$I_{DC,max}$	-	226	300 ²⁾	A
Battery voltage (DC)	U_{max}	260 ³⁾	700	800 ³⁾	V
Speed	n_{max}	-	2260	3740 ⁴⁾	rpm
Electric frequency	$f_{el,max}$	-	188	312	Hz



- 1) Defined Range only valid for a power factor of 1 at DC input
- 2) Peak rating for max. 60 seconds on time
- 3) Derating @ 260-450V and >800V
- 4) Higher speeds available upon request. A detailed discussion of the functional safety concept of the vehicle is required.

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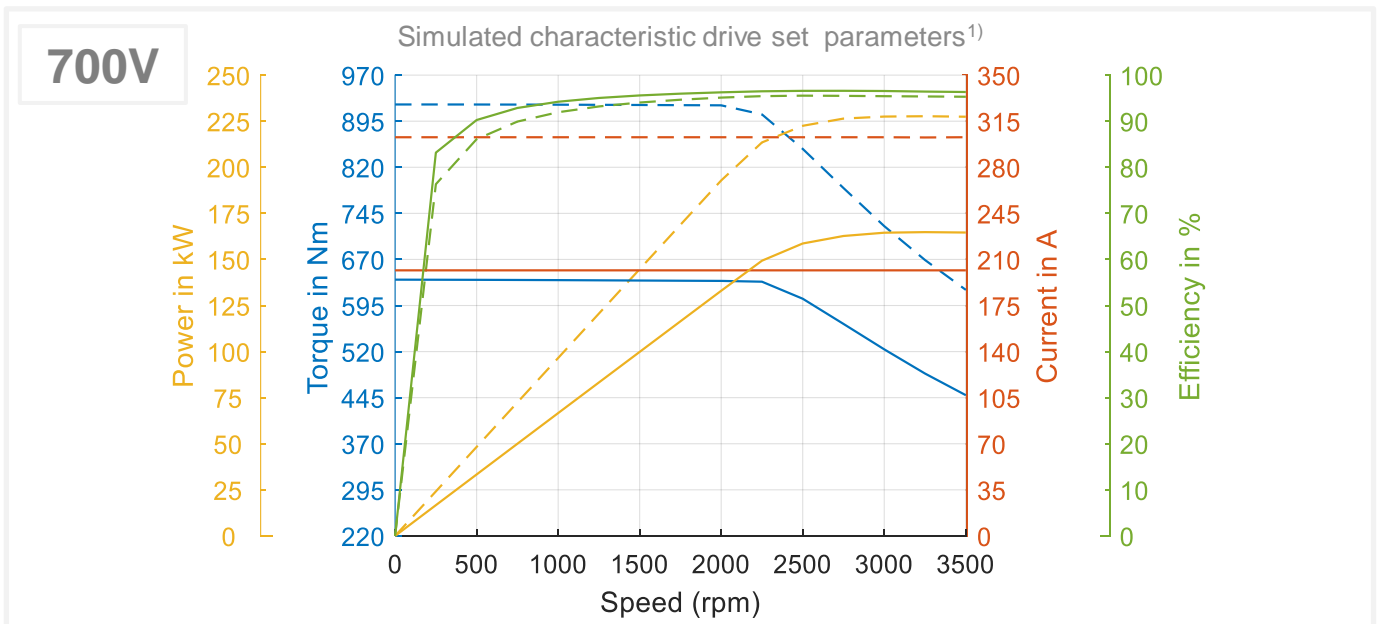
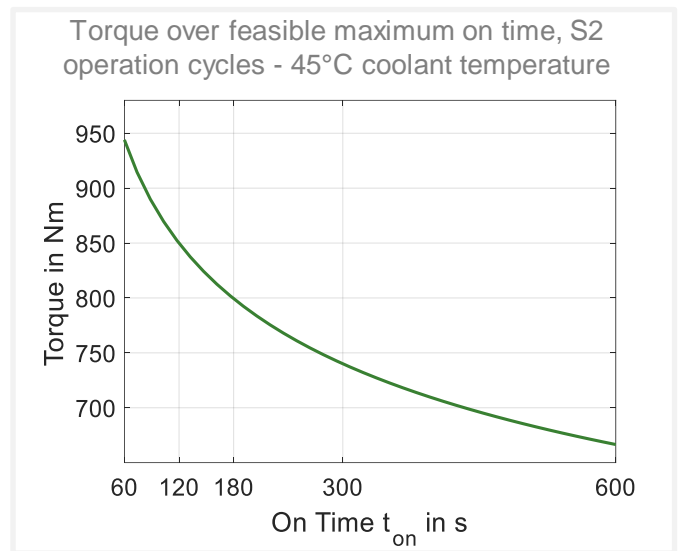
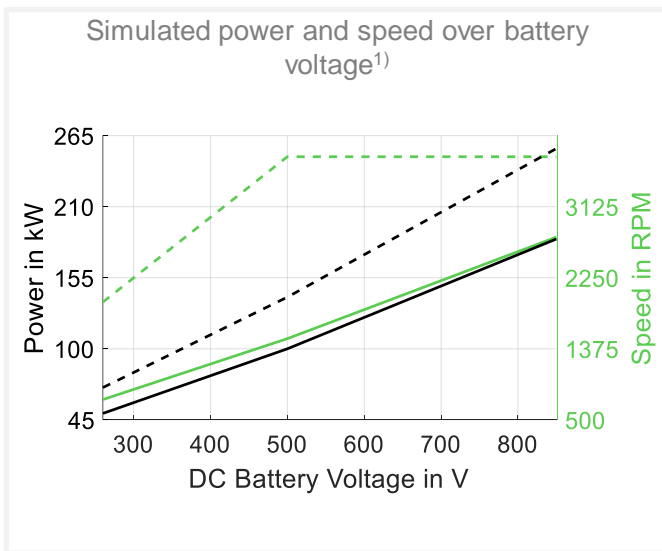
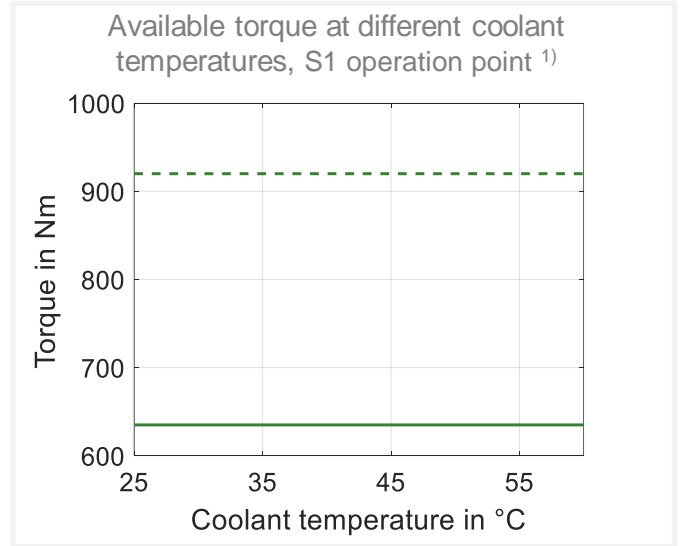
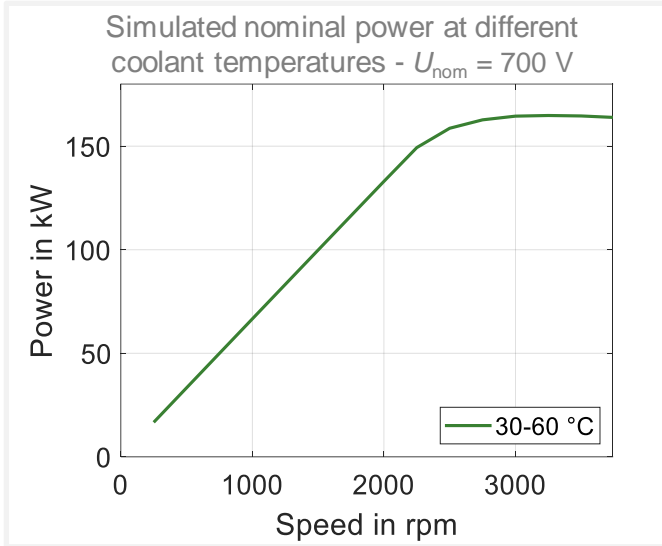
Additional Data					
		Motor	Inverter		
Weight (w/o cables)		137	10	kg	
Rotor moment of inertia		0.153	-	kg*m ²	
Allowed range of ambient temperature		-20 ... +85	-40 ... +90	°C	
Cooling	Advised medium (OAT Coolants)	water/glycol - 50/50 ▪ TL 774-D/F ▪ VIN 878389 ▪ MAN 324 SNF ▪ MTL 5048			
	Flow rate	>14	8-12	l/min	
	Inlet temperature	≤ 60 ¹⁾	≤ 45	°C	
	Pressure drop	0.25-0.5	nom. 0.25	bar	
	Maximum pressure	2	2.5	bar	
	Cooling channel volume	2.16	0.5	l	
DC link capacitance		-	240	µF	
Temperature monitoring		1 x KTY84-130	Internal		
Rotation direction		freely controllable via CAN-Bus			
Ports					
Power terminals		2-Phase HVDC, 3-Phase HVAC			
Signal connectors		CMC, 28-Pin			
Cooling connectors		inner Ø 15 mm, outer Ø 19 mm			
Control and Communication					
Type		Slave			
		Speed/Torque Control freely controllable via interface			
CAN Bus	Symbol/Baud rate	250/500 kbaud/s			
	Technology	CAN 2.0, J1939 like			
Torque Ramp		Safety limits can be set in inverter by ENGIRO.			
Speed Ramp		Safety limits can be set in inverter by ENGIRO.			

1) Derating for T_{coolant} > 45°C

Certifications			
	Motor	Inverter	
Type approval	CE, EN 60034	-	
Environmental	Prepared for ISO 9227	-	
Protection grade	ISO 20653 IP6k9k ²⁾	ISO 20653 IP67	
Vibrations	Prepared for ISO 16750-3	ISO 16750-3	
EMC	-	CISPR25, ECE R10 ¹⁾	
Functional safety	-	Designed for ISO 26262 up to ASIL-C	
Custion tariff number	8501 5381	8504 4088	

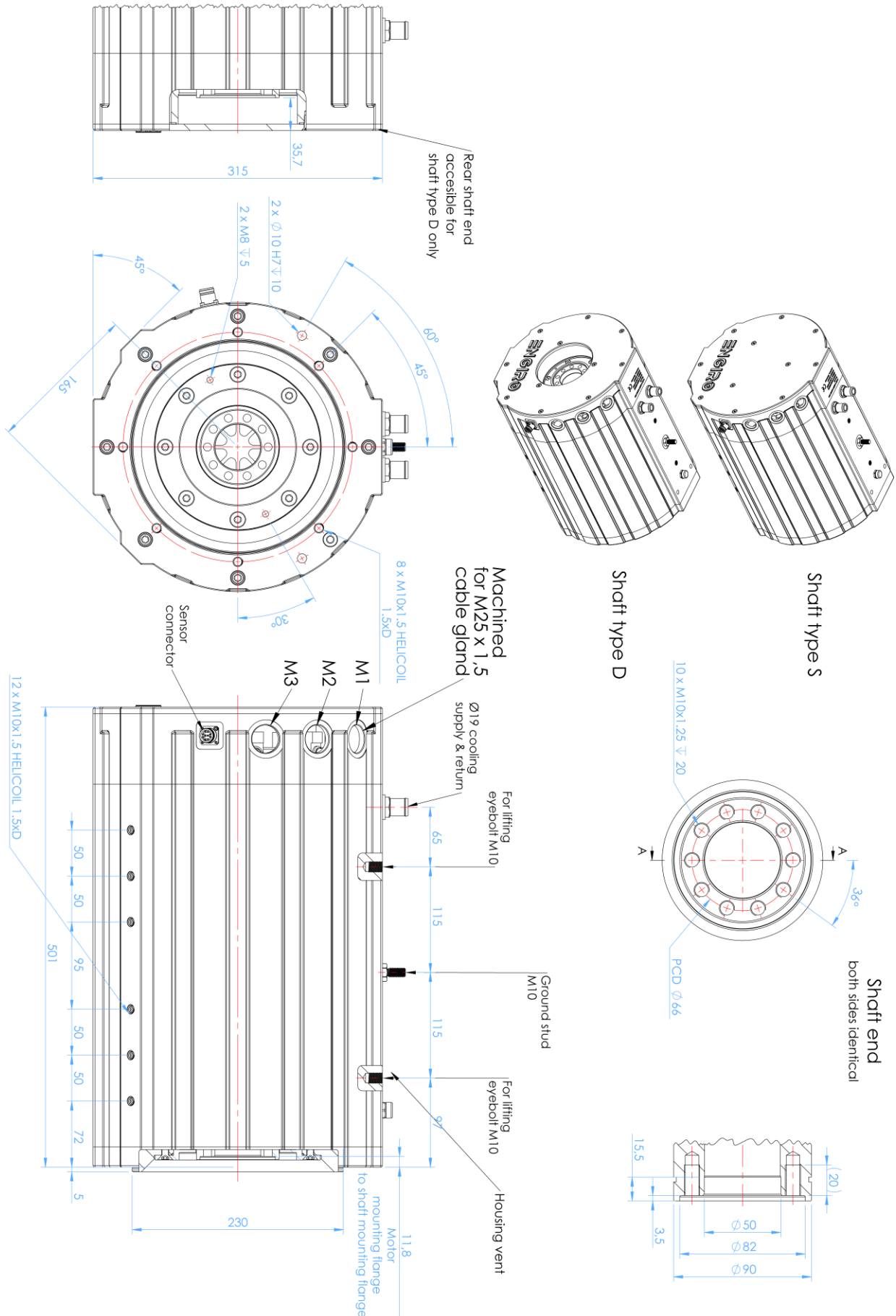
- 1) Available upon request.
- 2) Please note that the IP6K9K rating is only valid if the machine is installed with suitable cable glands and an appropriate sealed interface at the drive side of the motor (flange and/or shaft). Please contact ENGIRO for further questions. / Only applies to SFR Variant /

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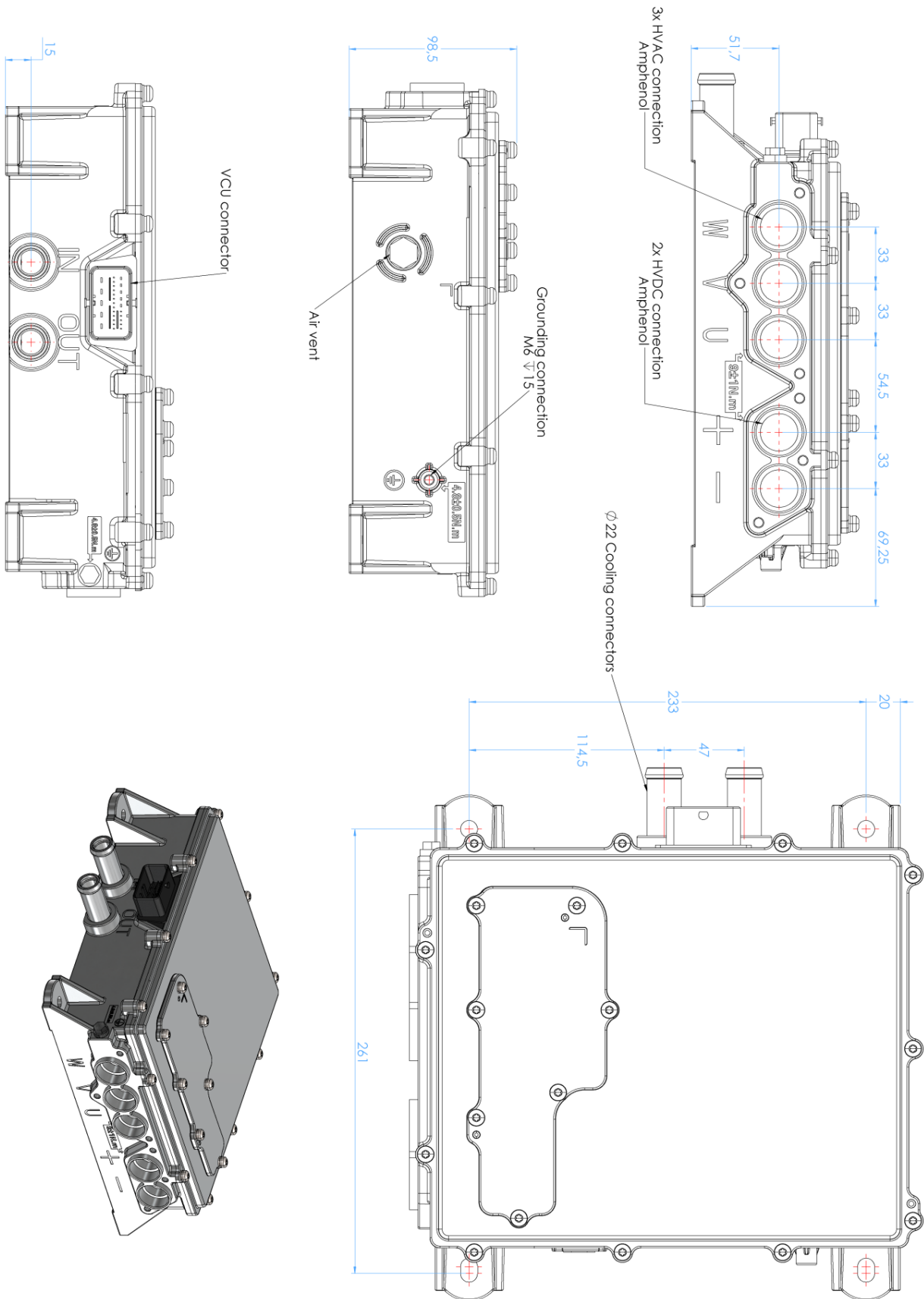


1) solid lines: continuous; dashed lines: maximum;

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260W-25018-SFR 800V Set					
Item description				Article number	
Available Motor Variants	A: flange	B: shaft	C: position sensor	Component	Set
	S: single side accessible	F: hollow shaft with two screw flanges	R: resolver	260W_25018_SFR	1758
ENGIRO 800V 3-phase motor controller 200/300 A w/o HV-AUX for 260W (gain 0,29)				1592	1x
Cables	Amphenol AC port 3 x 35mm ² Leoni cables with connector			1587	1x
	Amphenol DC port 35 mm ² cable with connector, 2000 mm			1588	1x
	Resolver + Temp. data cable for ENGIRO 260W / 3-phase motor controller, length: 2m			1666	1x
Cable glands M25 shielded Pflitsch blueglobe IP 69k				1378	3x
Cable lugs DIN 46234 35-8				1332	3x

included in set

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